WHAT IS CLAIMED IS:

1.   A method of parsing a data packet; said method comprising:

executing an initial parse of said data packet;

determining whether additional parsing is required; and

responsive to said determining, selectively executing an additional parse.

2.   The method of claim 1 further comprising selectively repeating said determining and said selectively executing an additional parse.

3.   The method of claim 1 further comprising:

identifying unparsed components of said data packet;

re-encoding parsed components of said data packet; and

reassembling said data packet using results of said identifying and said re-encoding.

4.   The method of claim 1 wherein said executing an initial parse includes examining said data packet to ascertain its basic structure.

5.   The method of claim 1 wherein said data packet is transmitted in accordance with Session Initiation Protocol (SIP).

6.   The method of claim 5 wherein said executing an initial parse includes examining a start line of said data packet.

7.   The method of claim 1 wherein said determining includes receiving a request for additional parsing of a specified component of said data packet.

8.   The method of claim 7 wherein said executing an additional parse includes parsing said specified component of said data packet in accordance with said receiving.

9.   A system for parsing a data packet incrementally; said system comprising:

a first parse engine executing an initial parse of said data packet;

a request processor; and

a second parse engine selectively executing an additional parse of said data packet responsive to instructions from said request processor.

10. The system of claim 9 wherein said first parse engine includes computer executable program code containing instructions for ascertaining the basic structure of said data packet.

11. The system of claim 9 wherein said request processor includes computer executable program code containing instructions for processing requests for additional parsing from components of a protocol stack.

12. The system of claim 9 wherein said request processor includes computer executable program code containing instructions for processing requests for additional parsing from an application program.

13. The system of claim 9 further comprising a reassembler including computer executable instructions for reassembling said data packet using parsed components and unparsed components.

14. The system of claim 9 wherein said first parse engine, said request processor, and said second parse engine are integrated into a protocol stack.

15. A protocol stack for use in a packet-switched data communications network; said protocol stack comprising:

    a parser including computer executable program code containing instructions for parsing an incoming data packet incrementally; and

    a request processor including computer executable program code for instructing said parser to execute additional parsing.

16. The protocol stack of claim 15 further comprising a reassembler including computer executable program code containing instructions for reassembling said data packet using parsed components and unparsed components.

17. The protocol stack of claim 15 wherein said request processor is responsive to requests for additional parsing from an application program.

18. A computer-readable medium encoded with data and computer executable instructions for parsing a data packet; the data and instructions causing an apparatus executing the instructions to:

    execute an initial parse of said data packet;

    determine whether additional parsing is required; and

selectively execute an additional parse.

19. The computer-readable medium of claim 18 further encoded with data and instructions, further causing an apparatus selectively to repeat:

determining whether additional parsing is required; and

selectively executing an additional parse.

20. The computer-readable medium of claim 18 further encoded with data and instructions, further causing an apparatus to:

identify unparsed components of said data packet;

re-encode parsed components of said data packet; and

reassemble said data packet using said unparsed components and said parsed components.

21. The computer-readable medium of claim 18 wherein said initial parse includes an examination of said data packet to ascertain its basic structure.

22. The computer-readable medium of claim 18 wherein said data packet is transmitted in accordance with Session Initiation Protocol (SIP).

23. The computer-readable medium of claim 22 wherein said initial parse includes an examination of a start line of said data packet.

24. The computer-readable medium of claim 18 wherein said instructions further cause an apparatus to receive a request for additional parsing of a specified component of said data packet.

25. The computer-readable medium of claim 24 wherein said additional parse includes parsing said specified component of said data packet in accordance with said request.

26. A system for parsing a data packet incrementally; said system comprising:

first parsing means for executing an initial parse of said data packet;

request means for processing a request for additional parsing; and

second parsing means for selectively executing an additional parse of said data packet responsive to instructions from said request means.

27. The system of claim 26 wherein said first parsing means comprises computer executable program code containing instructions for ascertaining the basic structure of said data packet.

28. The system of claim 26 wherein said request means comprises computer executable program code containing instructions for processing requests for additional parsing from components of a protocol stack.

29. The system of claim 26 wherein said request means comprises computer executable program code containing instructions for processing requests for additional parsing from an application program.

30. The system of claim 26 further comprising reassembling means for reassembling said data packet using parsed components of said data packet and unparsed components of said data packet.

31. The system of claim 26 wherein said first parsing means, said request means, and said second parsing means are integrated into a protocol stack.